



# Colortrac enhanced Scanners - Technical Specifications

	5480e	4280e	4860e	3680e	4260e	3640e
Resolution (selectable in 1 dpi steps) ~ optical (dpi) ~ maximum (dpi)	400 2400	400 2400	300 1800	400 2400	300 1800	200 1200
Active Scan Area (inches / cm)	54 / 137.2 x unlimited	42 / 106 x unlimited	48 / 121.9 x unlimited	36 / 91.4 x unlimited	42 / 106 x unlimited	36 / 91.4 x unlimited
Maximum Document Width (inches /cm	) 55 / 139.7	43 / 109.2	55 / 139.7	43 / 109.2	43 / 109.2	43 / 109.2
Scan Rates* inches per second @200d ~ colour ~ greyscale (R2GB) ~ greyscale (Greenscale) ~ black & white	pi 1.5"/s 1.5"/s 4.5"/s 4.5"/s	1.5"/s 1.5"/s 4.5"/s 4.5"/s	2.66"/s 2.66"/s 4.0"/s 4.0"/s	2.0"/s 2.0"/s 6.0"/s 6.0"/s	2.66"/s 2.66"/s 6.0"/s 6.0"/s	2.0"/s 2.0"/s 6.0"/s 6.0"/s
Imaging Technology	3 cameras	3 cameras	2 cameras	2 cameras	2 cameras	1 camera

All models use tri-linear CCD cameras of 7,500 pixels width Open Aperture, glassless image path for streak free scanning 36-bit Primary Point Digital Data Capture Fully automatic digital camera stitching (Front/Back & Left/Right)

Isolated chassis and 3-point optics mountings

+/- 0.1% plus a digitising rounding error of +/- 1 pixel Scan Accuracy

Media Handling Maximum media thickness 0.47", 12mm, adjustable in 1mm steps / Twin pinch rollers

Document Type

Illumination & Optics Twin long life colour balanced Daylight Blue tubes, Apochromatic Lenses

Colour & Image Processing Gamma & Brightness, Automatic Light Level adjustment Black & White Point adjustment

ICC colour device characterisation profile (sRGB)

Downloadable Indexed Colour Paletting

Image Sharpening Hardware

Monochrome Thresholding 2D Intelligent Adaptive Thresholding Hardware (IAT)

**Output Modes** 

24-bit RGB Colour / 256 & 16 Colour Optimised Palette 256 Level Greyscale (R2GB & Greenscale) / Black & White / Dithered Black & White

FireWire (400Mb/s), Ultra Wide SCSI (upto 40 MB/s) Interface

4280e / 4260e / 3680e / 3640e 99cm x 142cm x 51cm

operating environment

59 ~ 86 F, 15 ~ 30 C, 15 ~ 85 % RH, non-condensing 90 ~ 250 VAC autosensing, 47 ~ 63 Hz, 250 VA

Colortrac Scanners Include ScanWorks, CopyWorks, CopyWorks, Profiler, BatchWorks, TWAIN (PC & MAC), Firewire Cable, Localised Power Cable.

Preditor, CopyWorks Plus , ReproWorks, Unix Software, Media Support Tray

# Minimum System Requirements

Pentium 1GHz Processor / 128MB RAM / 10GB Disk Space / 24-bit

Graphics Display Card
SCSI Interface, 68 pin half pitch Dsub connector with thumbscrews or firewire interface
Windows™ 2000 / ME / XP
\*\*excluding CopyWorks

The scan rate is proportional across the full range of resolutions supported by the scanner

owever, the actual scan times will depend on the host system performance Contact your local supplier for advice on the optimum system configuration for your application

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# Colortrac Scanners

A Versatile range of High Performance Colour & Monochrome Solutions now with enhanced features and exceptional performance for copying and scanning.



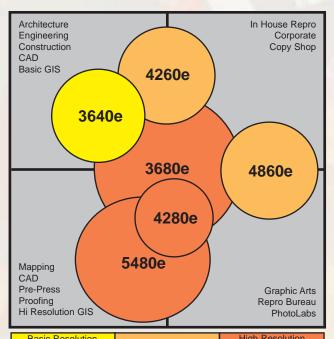
- Firewire Plug 'n' Play
- Glassless Scan Path
- Vivid Colours
- Shadowless Scans
- Thick Media Support
- 2 Year Warranty
- Hardware Accelerated Monochrome
- Scanning, Copying and ICC Profiling Software Included

# Colortrac Scanners, enhanced

With over 50 years combined scanning experience ACTion Imaging Solutions bring together technology from 4 leading manufacturers (ANAtech, Colortrac, Tangent and Scangraphics). ACTion Imaging Solutions provide a complete system with all the scanning hardware and software you'll need for perfect scans and copies every time. Colortrac Scanners are designed to provide a flexible range of formats and quality options to meet your

needs whatever the application. Whether it be maps, monochrome line drawings, detailed colour photographs or 12mm thick display boards you'll get accuracy and quality with maximum

Formats and Resolutions. The Colortrac scanners are available in a range of four carefully selected scan widths handling originals up to 12mm thick and three optical resolution options, providing the best performance and quality for any application. Use the market sector diagram as a guide to the optimum model for your application.



36" width -1200 dpi: General A0/E graphics imaging and copying applications

36" width -2400 dpi: A0/E basic GIS & CAD scanning, archiving & graphics copying

42" width - 1800 dpi: B0 basic GIS & CAD scanning, archiving & graphics

42" width - 2400 dpi: B0 advanced GIS & CAD scanning, archiving & graphics copying

48" width - 1800 dpi: A0/E landscape format, general graphics imaging & copying

54" width - 2400 dpi: A0/E landscape, professional imaging

services & LF copying

(see back page for detailed model specification)

Open Scan Aperture. Tired of streaks spoiling your scans and constant time consuming cleaning of scan glass? Acting directly on customer feedback, Colortrac developed a sophisticated glass-less media scan path to ensure high quality, 'streak' free, copies & scans that save end users time, money and reduce media waste. Any dust entering the open aperture, is outside the focus and not seen by the CCD cameras.

Illumination. Folded and creased originals could cause annoying shadowing effects on scans and copies but this is now eliminated by using a transparent material at the original path, maximizing the depth of illumination.

Automatic Camera Alignment (AutoStitch). Colortrac scanners have a fully automatic digital CCD alignment tool that enables users to perform camera to camera stitching as a simple software operation. There is no need to remove panels or to get your screwdriver out to align cameras. Once the alignment is set, ACTion Imaging's pivoted, three point mounted chassis and optics ensures that it stays SET, and stable, even when the scanner is moved or re-located within the premises.

Colour Calibration. All scanners use Dynamic Normalisation Application (DNA) with 12-bit super sampled data to analyze and automatically set 'dark' and 'light' levels. The colour data is sent to the application s/w in its raw form with no calibration scheme imposed that can limit the range of

colours available from the scanner. Scan in industry standard sRGB colour space enabling colour management systems to process the data accurately and specifically for the rendering device selected, thus ensuring the best possible colour reproduction.

400Mb/s FIREWIRE and 40 MB/s Ultra Wide SCSI interfaces. Why limit yourself to one interface when you can have the use of either Firewire with the convenience of plug and play, long cable lengths still with data speed to spare or SCSI, the tried and tested professionals solution. Either method ensure that, given a fast enough PC and hard disk system, you can ACHIEVE the specified scanning speeds. Even if you don't need to with todays' printer speed, your investment is protected with performance to spare for tomorrows PC and printer developments.

# **Included Software**

# ScanWorks - Scanning Software



Intuitive viewing & editing Scan once, edit many, archive

- Works the way you like to work
- 4 Maximum workflow efficiency

- 24-bit RGB, 256 & 16 colour optimised palette, 256 level greyscale, black &
- Single Image or Batch file scanning with automatic original detection & scan
- Utilities for scanner calibration and fully automatic camera stitching ISO, American and Auto-size to original document

# User Interface & Document Viewing Tools

- Simple, intuitive user interface with Icon Buttons for most scan & imaging
- Real time 1:1 zoom view and pan while scanning
- Thumbnail view of entire image for zoom reference & navigation
- Loupe view with selectable 100, 200, 400% zoom.

# Image Filtering Tools

- Sharpen / Blur filters
- Noise removal filters to reduce screen patterns etc
- Tone Reproduction Curve editor for RGB or R,G,B
- Gamma, brightness, contrast and black & white point adjustment
- · De-skew to any angle, Rotate 90° CW & CCW
- Crop to selected area, Mirror about Y axis
- Convert from current or saved imagetype to another
- Invert Greyscale or B&W images
- De-speckle with variable spot size
- Adaptive 2D and Fixed Thresholding for B&W
- · Undo and Tool Reset buttons

# Archiving

- · Auto indexing filenames
- Filename Browse / Create
- Presets ~ Create / Save / Open; proven scanner & filter setups
- Multiple industry standard raster file formats

# Batch Processing and Scheduling

- · Batch process scanned archives with a choice of image filtering tools and file
- Use Batch Schedular to run unattended batch processing when the workstation is available or for overnight runs.

# General Preferences

· Select units, language & temporary files location

# **Software Options**

# An enhanced version of copyworks with additional features.

- Text & Bitmap (logo) insertion via Pre-scan
- Simultaneous output to two local and/or networked LF printers
- Paneling with adjustable overlap margins CMYK sliders for fine adjustment of ink levels and colour reproduction
- Colour calibrated print from file

# ReproWorks

A high quality professional colour reproduction and printing application. Designed for the sophisticated user ReproWorks delivers the performance and quality that experienced colour users demand

# Preditor

A professional raster editor specifically designed for high speed viewing and editing of large colour, greyscale and monochrome images, optimised for easy to use raster editing, image clean up and drawing functions.

# **ACTion Indexing Software**

Making the capture of index data from scanned engineering drawings simple Automatically displaying the title block so drawing information can be entered into the data window. Project information is stored in the common Microsoft

Contact your Action Imaging Solutions Dealer for pricing information.

# CopyWorks (standard) - Copying Software



Single button operation Preview & crop

- Industry standard colours 4 Increased user confidence

- Automatic selection of optimum scan resolution
- Colour photos, posters & prints, monochrome photos & greyscale, black & white drawings
- Image processing filters optimised for photographic, map or line art (text) originals
- . ISO, American and Auto-size to original document

- Pre-scan
- Zoom & crop

# HP. Epson, Encad, Canon and other printers

- Control for printer quality mode and resolution

Black & white points and brightness adjustment

- Simultaneous copy and archive of scanned image 'on-the-fly
- Scaling 1 ~ 500% and 1 ~ 20 copies Step & Repeat with adjustable margin & mirror printing for back-lit or

# CopyWorks Profiler - ICC Profiling Software ate industry standard ICC profiles for your scanner and printer t

ensure accurate colour reproductions of your originals, giving more versatility than a closed loop process and greater compatibility with enterprise wide colour management systems.

# **TWAIN Interface**

An industry standard TWAIN interface is provided for both PC and MAC\* platforms enabling data capture from your favourate TWAIN compliant

(\*SCSI interface only)



